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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,313	06/22/2001	Ian Tomlinson	8039/1122	9556

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EXAMINER

TRAN, MY CHAU T

ART UNIT PAPER NUMBER

1639

DATE MAILED: 11/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/888,313

Applicant(s)

TOMLINSON ET AL.

Examiner

My-Chau T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-55 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 16-25, 34-36, 45-47, and 55, are drawn to a method for screening a first repertoire of molecules, classified in class 436, subclass 2.
 - II. Claims 9, 16-25, and 55, are drawn to a method for screening a first, second, and third repertoires of molecules, classified in class 435, subclass 4.
 - III. Claims 10 and 55 are drawn to a method for creating a combinatorial library of two-chain polypeptides, classified in class 530, subclass 323.
 - IV. Claims 11-12 and 16 are drawn to a method for screening a combinatorial library of two-chain polypeptides, classified in class 436, subclass 55.
 - V. Claims 13 and 55 are drawn to a method for creating a combinatorial library of three-chain polypeptides, classified in class 530, subclass 331.
 - VI. Claims 14-16 are drawn to a method for screening a combinatorial library of three-chain polypeptides, classified in class 435, subclass 3.
 - VII. Claims 26 and 55, drawn to a method for screening a first repertoire of molecules against a second repertoire of molecules, classified in class 436, subclass 8.
 - VIII. Claims 27-31 and 55, drawn to a method for screening a first repertoire of molecules against a second repertoire of molecules with a third molecule or set of molecules, classified in class 436, subclass 144.

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- IX. Claim 32, drawn to an apparatus drawing on a medium, classified in class 435, subclass 287.3.
- X. Claim 33, drawn to an apparatus with intersecting channels or tubes, classified in class 435, subclass 288.1.
- XI. Claims 37-38 and 55, drawn to a method for optimizing conditions for biological interactions, classified in class 435, subclass 287.1.
- XII. Claims 39, 46 and 55, drawn to a method for screening a first and second repertoires of enzymes, classified in class 435, subclass 184.
- XIII. Claims 40, 46 and 55, drawn to a method for screening a plurality of cellular populations against a plurality of viral populations, classified in class 435, subclass 235.1.
- XIV. Claims 41, 46 and 55, drawn to a method for screening a plurality of different cellular fractions, classified in class 435, subclass 34.
- XV. Claims 42, 46 and 55, drawn to a method for screening a plurality of cellular populations against one another, classified in class 435, subclass 7.2.
- XVI. Claims 43, 45-47, and 55, drawn to a method for screening a peptide repertoire, classified in class 436, subclass 86.
- XVII. Claims 44-47 and 55, drawn to a method for screening a polypeptide repertoire, classified in class 436, subclass 145.
- XVIII. Claims 48-49 and 54-55, drawn to a method of creating a combinatorial library consisting of polypeptides with transforming the cells, classified in class 435, subclass 71.1.

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- XIX. Claims 50-51 and 54-55, drawn to a method of creating a combinatorial library consisting of polypeptides with infecting the cells, classified in class 435, subclass 70.1.
- XX. Claims 52-55, drawn to a method for creating a yeast two hybrid library, classified in class 435, subclass 7.31.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Groups I-VIII and XI-XX are unrelated and independent inventions. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions as claimed have different method steps that have different functions and modes of operation.

The method step of arranging the first and second repertoires to form an array of Group I is not required by the claims of Groups II-VIII and XI-XX. The method step of arranging the first, second, and third repertoires to form an array of Group II is not required by the claims of Groups I, III-VIII and XI-XX. The method step of creating a combinatorial library of two-chain polypeptides of Group III is not required by the claims of Groups I-II, IV-VIII and XI-XX. The method step of detecting the interaction between the two chain polypeptides and the target molecule of Group IV is not required by the claims of Groups I-III, V-VIII and XI-XX. The method step of creating a combinatorial library of three-chain polypeptides of Group V is not required by the claims of Groups I-IV, VI-VIII and XI-XX. The method step of detecting the interaction between the three chain polypeptides and the target molecule of Group VI is not

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required by the claims of Groups I-V, VII-VIII and XI-XX. The method step of identifying those members of the first and second repertoires that do not interact with each other of Group VII is not required by the claims of Groups I-VI, VIII and XI-XX. The method step of detecting the interaction between members of the first and second repertoires that depends on the presence or absence of a third molecule or set of molecules of Group VIII is not required by the claims of Groups I-VII and XI-XX. The method step of creating all combinations of two or more different sets of variable parameters of Group XI is not required by the claims of Groups I-VIII and XII-XX. The method step of identifying those members of the first and second repertoires that together participate in a two or more step enzymatic reaction of Group XII is not required by the claims of Groups I-VIII, XI, and XIII-XX. The method step of detecting viral infection in the plurality of cellular populations of Group XIII is not required by the claims of Groups I-VIII, XI-XII and XIV-XX. The method step of detecting the interaction of different cellular fractions of Group XIV is not required by the claims of Groups I-VIII, XI-XIII, and XV-XX. The method step of identifying those cellular populations the interact with the other cellular populations tested of Group XV is not required by the claims of Groups I-VIII, XI-XIV, and XVI-XX. The method step of detecting the interaction of different members of the peptide repertoire of Group XVI is not required by the claims of Groups I-VIII, XI-XV, and XVII-XX. The method step of detecting the interaction of different members of the polypeptide repertoire of Group XVII is not required by the claims of Groups I-VIII, XI-XVI, and XVIII-XX. The method step of transforming the cells containing the members of the first repertoire of Group XVIII is not required by the claims of Groups I-VIII, XI-XVII, and XIX-XX. The method step of infecting the cells containing the members of the first repertoire of Group XIX is not required by the

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claims of Groups I-VIII, XI-XVIII, and XX. The method step of allowing the yeast cells containing the members of the first repertoire to mate with the yeast cells containing the members of the second repertoire of Group XX is not required by the claims of Groups I-VIII and XI-XIX.

3. Inventions of Group I (process) and Group IX (apparatus) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as the method of depositing DNA onto a biochip or the method of Group VIII. This restriction requirement is also applicable with the methods of Groups II-VIII and XI-XX.

4. Inventions of Group I (process) and Group IX (apparatus) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case as claimed can be used to practice another and materially different process such as method of cellular separations or the method of Group XII. This restriction requirement is also applicable with the methods of Groups II-VIII and XI-XX.

5. Because these inventions are distinct for the reasons given above and the searches required are not co-extensive thus requiring a burdensome search, restriction for examination purposes as indicated is proper. Additionally, different patentability considerations are involved for each group. For example, a patentability determination for Group III would involve a determination of the patentability of the a method for creating a combinatorial library of two-chain polypeptides while a patentability determination for Group XIII would involve a consideration of the patentability of the a method for screening a plurality of cellular populations against a plurality of viral populations. These considerations are very different in nature.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 703-305-6999.

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The examiner is on ***Increased Flex Schedule*** and can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 703-306-3217. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

mct
October 31, 2002


PADMASHRI PONNALURI
PRIMARY EXAMINER